

County Environmental Health Profile

Environmental Topics

Carcinogenic Emissions

For more information go to: <http://dnr.wisconsin.gov/air/emission/>

Drinking Water

For more information go to: <http://dnr.wisconsin.gov/org/water/dwg/>

Health Topics

Asthma Hospitalizations

For more information go to: <http://dhs.wisconsin.gov/eh/asthma/>

Cancer

For more information go to: <http://www.dhs.wisconsin.gov/wcrs/>

Carbon Monoxide Poisoning

For more information go to: <http://www.dhs.wisconsin.gov/eh/air/fs/CO.htm>

Childhood Lead Poisoning

For more information go to: <http://dhs.wisconsin.gov/lead/>

Myocardial Infarction Hospitalizations

For more information go to: <http://dhs.wisconsin.gov/health/cardiovascular/>

Reproductive Outcomes

For more information go to: <http://dhs.wisconsin.gov/wish/>

About This Report

This report was created by the Wisconsin Environmental Public Health Tracking (EPHT) program.

For more information go to: <http://dhs.wisconsin.gov/epht/>

Milwaukee County Environmental Health Profile, October 2010

Carcinogenic Emissions

Carcinogenic emissions are chemicals in the air that are known to cause or promote cancer. The exact impact of environmental pollutants on cancer is unknown, but it is believed approximately 10% of all cancers are related to environmental factors. In Wisconsin, industries report their annual emissions data to the Wisconsin Department of Natural Resources. These data are further submitted to the US Environmental Protection Agency where they are used in modeling programs to estimate health risks. The emission data presented here are based on models that estimate pollution concentration in outdoor air from industries' annual reports. If you would like specific information about emissions in an area, contact your regional Department of Natural Resources at <http://dnr.wi.gov/org/caer/cs/ServiceCenter/SSbyRegion.html>. The population data are from the 2000 U.S. Census. The emission concentration data are from the 1999 NATA (National-Scale Air Toxics Assessment) from the U.S. EPA <http://epa.gov/ttn/atw/nata1999/tables.html>.

Percent of the population in the county in each lifetime cancer risk category, 1999

County Lifetime Cancer Risk	Milwaukee							
	<1/million		1 to <10/million		10 to <100/million		≥100/million	
	Total Concentration	% Pop	Total Concentration	% Pop	Total Concentration	% Pop	Total Concentration	% Pop
Pollutant								
Acrylonitrile	0.000539	100.0%	.	.	.	.	.	.
Arsenic compounds	0.000063	98.8%	0.000323	1.2%	.	.	.	.
Asbestos	0.000000	100.0%	.	.	.	.	.	.
Benzene	.	.	1.207270	8.3%	1.667750	91.7%	.	.
Benzidine	0.000000	100.0%	.	.	.	.	.	.
Beryllium compounds	0.000008	100.0%	.	.	.	.	.	.
Bis(chloromethyl)ether	0.000000	100.0%	.	.	.	.	.	.
Cadmium compounds	0.000067	99.7%	0.001166	0.3%	.	.	.	.
Chloromethyl methyl ether	0.000000	100.0%	.	.	.	.	.	.
Chromium VI	0.000021	0.0%	0.000185	99.1%	0.000917	0.9%	.	.
Coke oven emissions	0.000000	100.0%	.	.	.	.	.	.
Diesel particulate matter	.	.	.	.	.	.	1.348190	100.0%
Ethylene oxide	0.008732	47.4%	0.015620	52.6%	.	.	.	.
Formaldehyde	.	.	.	.	1.817437	100.0%	.	.
Methylene chloride	0.666896	100.0%	.	.	.	.	.	.
Perchloroethylene	0.165252	0.0%	0.300122	100.0%	.	.	.	.
Trichloroethylene	0.144498	99.1%	0.664898	0.9%	.	.	.	.
Vinyl chloride	0.079705	100.0%	.	.	.	.	.	.

Notes:

1 in a Million Cancer Risk - A risk level of 1 in a million implies a likelihood that up to one person, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day, 7 days a week) to the specific concentration over 70 years (an assumed lifetime). This would be in addition to those cancer cases that would normally occur in an unexposed population of one million people. Note that this assessment looks at lifetime cancer risks, which should not be confused with or compared to annual cancer risk estimates. If you would like to compare an annual cancer risk estimate with the results in this assessment, you would need to multiply that annual estimate by a factor of 70 or alternatively divide the lifetime risk by a factor of 70. A 1 in a million lifetime risk to the public in 1996 was 250 cancer cases over a 70 year period.

% Pop (Population) - Percent of population in each category of Lifetime Cancer Risk.

Drinking Water

Wisconsin Public Water Use Index, 2010



Milwaukee County Environmental Health Profile, October 2010

Drinking Water

County level community water supply characteristics, 2010

	Ground Water Population	Surface Water Population	Population Served	County Population	Public Water Use Index
County					
Milwaukee	2,540	980,774	983,314	940,164	105

Wisconsin Community Water Systems

	Number of Community Water Systems	Population Served
Type		
Municipal community	612	3,921,103
Other than Municipal, community	456	71,139
Total	1,068	3,992,242

Notes:

Only data for active community water systems (numbering 1,068) were included. Population estimates for each public water system are updated every one to five years depending upon water system purveyor. The data were downloaded on 9/8/2010 from the DNR website at [http://prodoasext.dnr.wi.gov/inter1/pws2\\$.startup](http://prodoasext.dnr.wi.gov/inter1/pws2$.startup).

Ground Water Population - Estimate of the population served by public water systems that have ground water sources. For water systems that use both water sources, the population is allocated according to the proportion of ground water source.

Surface Water Population - Estimate of the population served by public water systems that have surface water sources. For water systems that use both water sources, the population is allocated according to the proportion of surface water source.

Population Served - Estimate of the population served by public water supplies which principally serve the county.

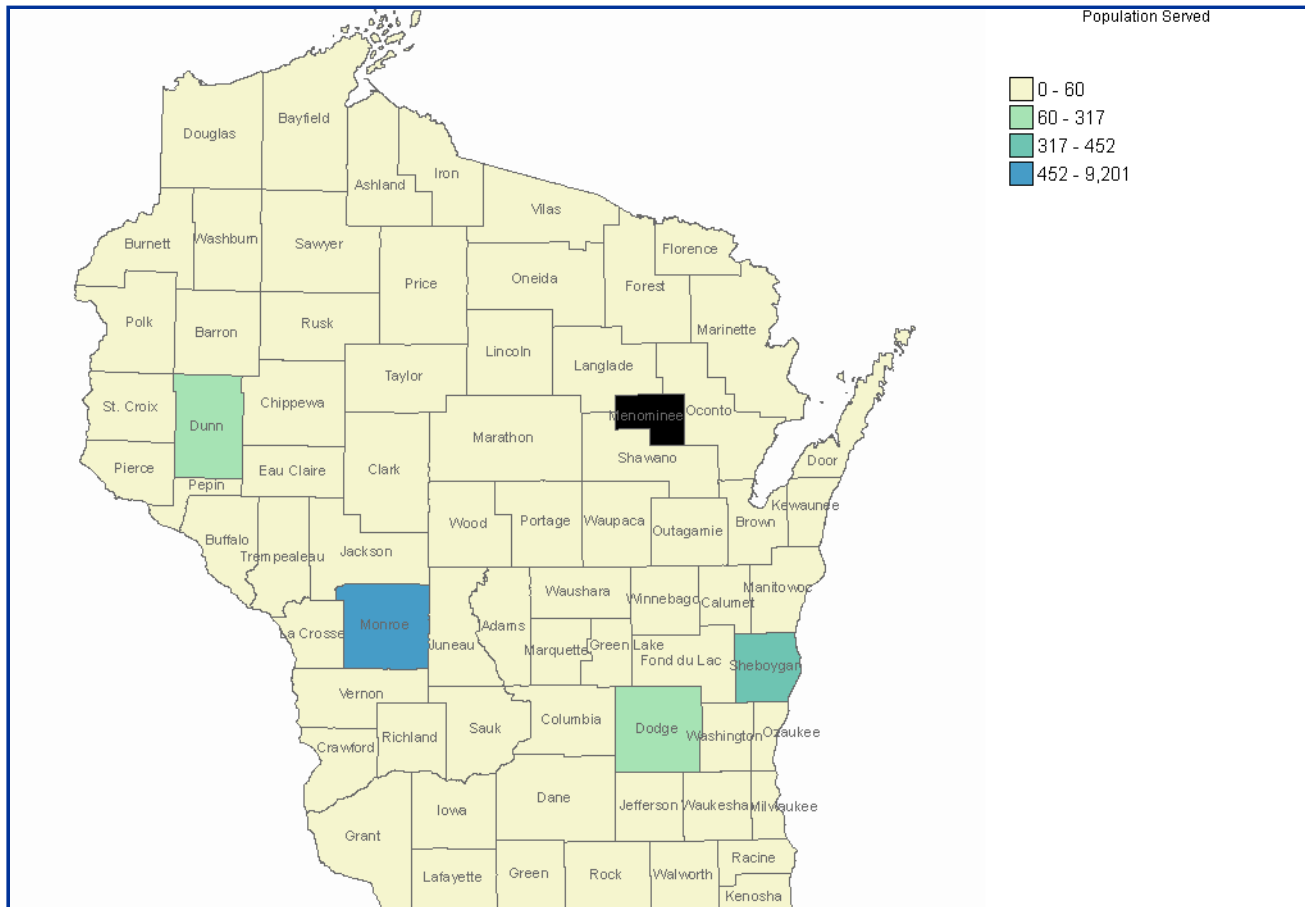
County Population - Estimate of county population from the 2000 US Census.

Public Water Use Index - Estimate of the percentage of the county population served by public water systems, calculated as Population Served / County Population × 100. Note, however, that some water systems (for example, those in Milwaukee county) also serve populations of neighboring counties.

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Nitrate

Population served where maximum Nitrate level is greater than or equal to 10 mg/L, 2009



Note: Black shading indicates no data available.

County	Milwaukee					
	2007		2008		2009	
Year	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
Nitrate Mean (mg/L)						
(Missing)	6	38,549	6	51,647	6	51,647
<3	17	929,602	16	916,454	17	916,504
3-<5	0	0	0	0	0	0
5-<10	1	15,163	2	15,213	1	15,163
10+	0	0	0	0	0	0

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Nitrate

County	Milwaukee					
Year	2007		2008		2009	
	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
Nitrate Max (mg/L)						
(Missing)	6	38,549	6	51,647	6	51,647
<3	17	929,602	16	916,454	16	867,440
3-<5	0	0	0	0	1	49,064
5-<10	1	15,163	2	15,213	1	15,163
10+	0	0	0	0	0	0

Notes:

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Population Served – A drinking water quality measure that estimates the total number of people that get water from a public water supply within a particular county. This number is a sum of all population served estimates from individual public water supplies that have their system locations identified within a particular county.

Mean – The annual average level of the specific contaminant measured in the county's community water system(s).

Maximum – The annual maximum level of the specific contaminant measured in the county's community water system(s).

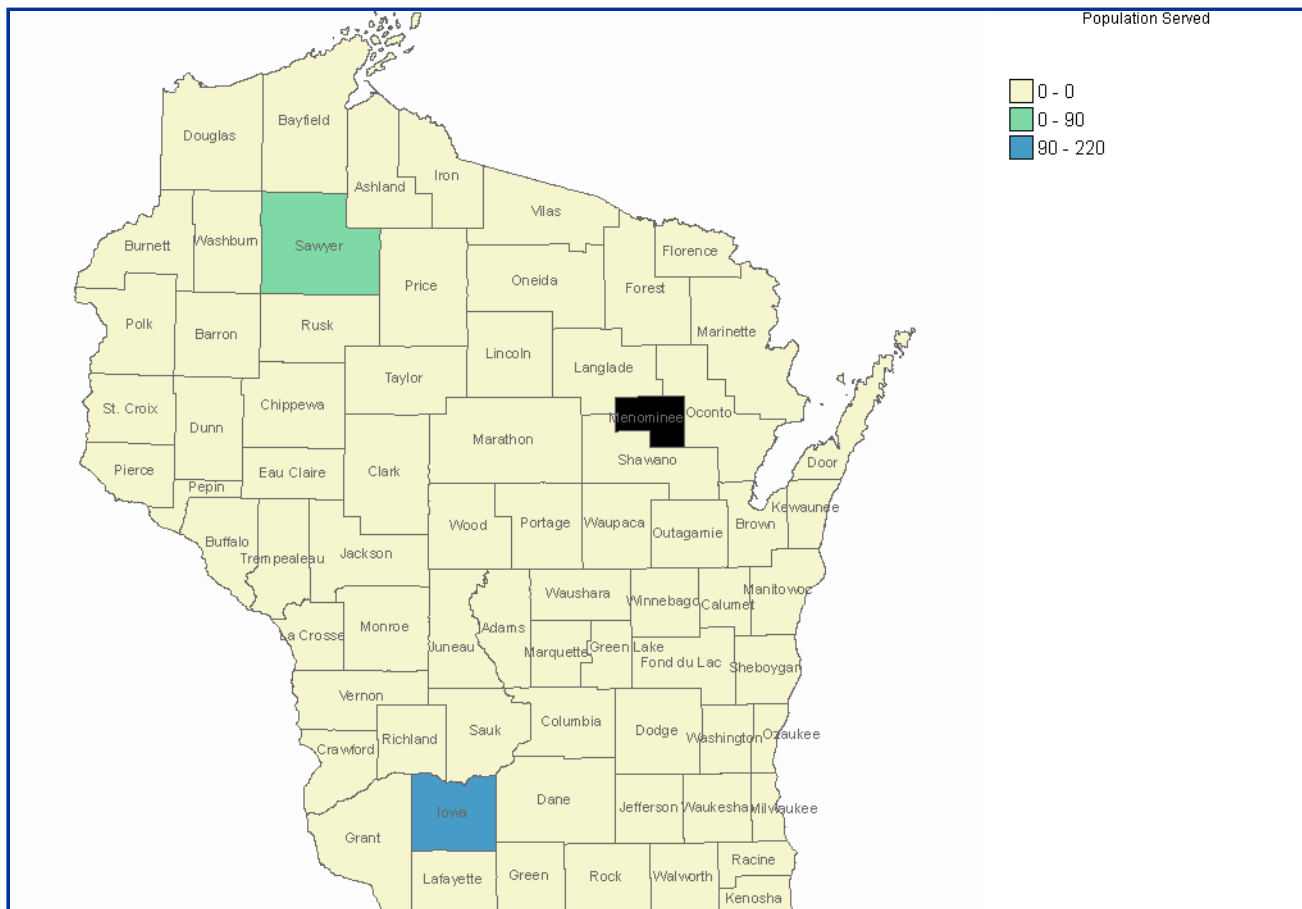
"(Missing)" – No test results were available for the year indicated or prior years.

Specific regulatory and health information for each contaminant can be found in the tables at <http://water.epa.gov/drink/contaminants/index.cfm>.

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Arsenic

Population served where maximum Arsenic level is greater than or equal to 30 mcg/L, 2009



Note: Black shading indicates no data available.

County	Milwaukee					
	2007		2008		2009	
Year	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
Arsenic Mean (mcg/L)						
(Missing)	6	38,549	6	38,549	5	16,049
<5	18	944,765	18	944,765	18	944,765
5-<10	0	0	0	0	1	22,500
10-<20	0	0	0	0	0	0
20-<30	0	0	0	0	0	0
30+	0	0	0	0	0	0

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Arsenic

County	Milwaukee					
Year	2007		2008		2009	
	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
Arsenic Max (mcg/L)						
(Missing)	6	38,549	6	38,549	5	16,049
<5	17	932,024	18	944,765	18	944,765
5-<10	1	12,741	0	0	0	0
10-<20	0	0	0	0	1	22,500
20-<30	0	0	0	0	0	0
30+	0	0	0	0	0	0

Notes:

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Population Served – A drinking water quality measure that estimates the total number of people that get water from a public water supply within a particular county. This number is a sum of all population served estimates from individual public water supplies that have their system locations identified within a particular county.

Mean – The annual average level of the specific contaminant measured in the county's community water system(s).

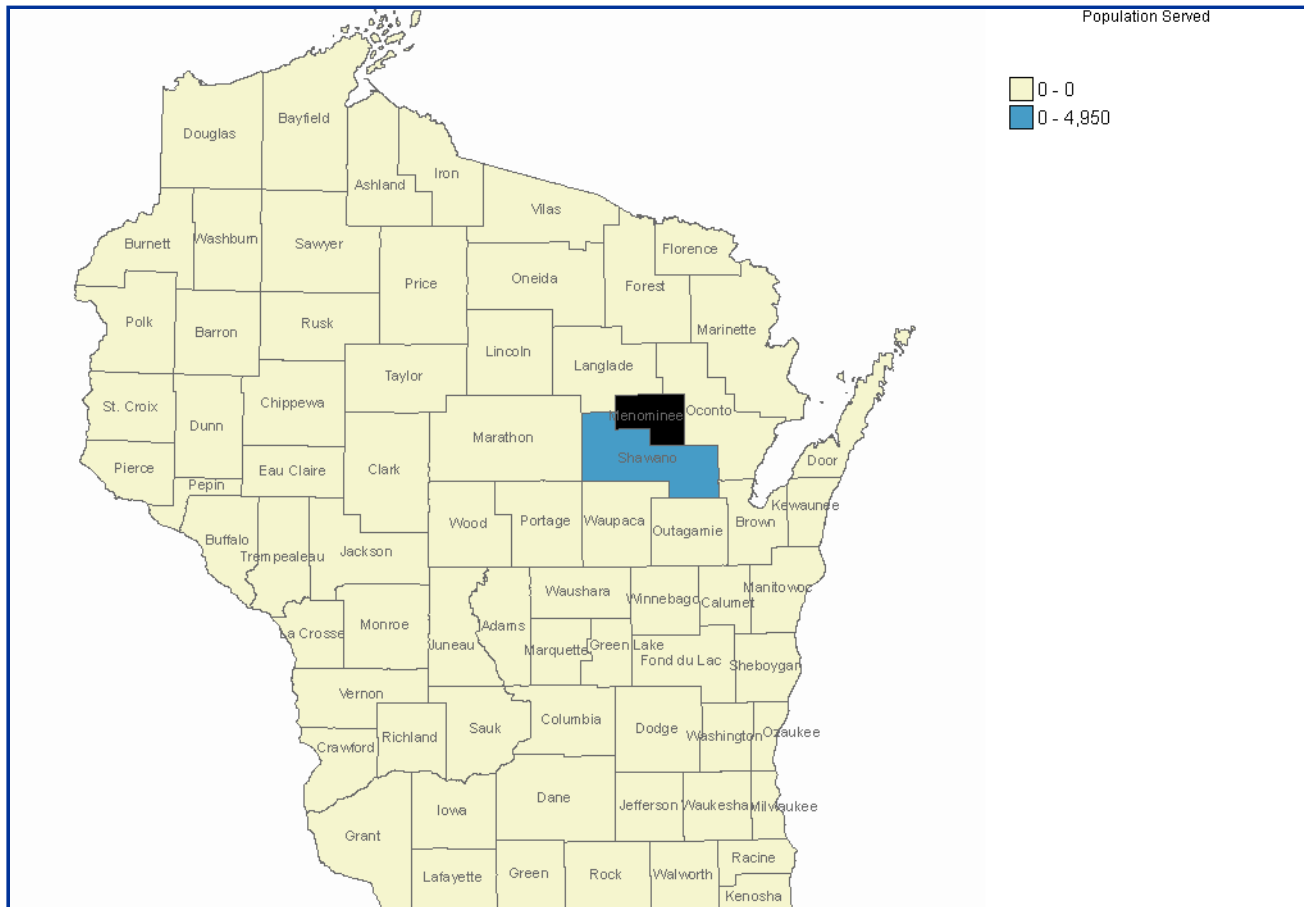
Maximum – The annual maximum level of the specific contaminant measured in the county's community water system(s).

"(Missing)" – No test results were available for the year indicated or prior years.

Specific regulatory and health information for each contaminant can be found in the tables at <http://water.epa.gov/drink/contaminants/index.cfm>.

Milwaukee County Environmental Health Profile, October 2010
Drinking Water - Total Trihalomethanes (TTHM)

Population served where maximum TTHM level is greater than or equal to 100 mcg/L, 2009



Note: Black shading indicates no data available.

County Year	Milwaukee					
	2007		2008		2009	
	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
TTHM Mean (mcg/L)						
(Missing)	12	112,199	11	99,458	11	99,458
<20	10	855,645	11	868,386	11	868,386
20-<40	1	14,405	2	15,470	2	15,470
40-<60	1	1,065	0	0	0	0
60-<80	0	0	0	0	0	0
80-<100	0	0	0	0	0	0
100+	0	0	0	0	0	0

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Total Trihalomethanes (TTHM)

County	Milwaukee					
Year	2007		2008		2009	
	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
TTHM Max (mcg/L)						
(Missing)	12	112,199	11	99,458	11	99,458
<20	10	855,645	11	868,386	11	868,386
20-<40	1	14,405	2	15,470	2	15,470
40-<60	1	1,065	0	0	0	0
60-<80	0	0	0	0	0	0
80-<100	0	0	0	0	0	0
100+	0	0	0	0	0	0

Notes:

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Population Served – A drinking water quality measure that estimates the total number of people that get water from a public water supply within a particular county. This number is a sum of all population served estimates from individual public water supplies that have their system locations identified within a particular county.

Mean – The annual average level of the specific contaminant measured in the county's community water system(s).

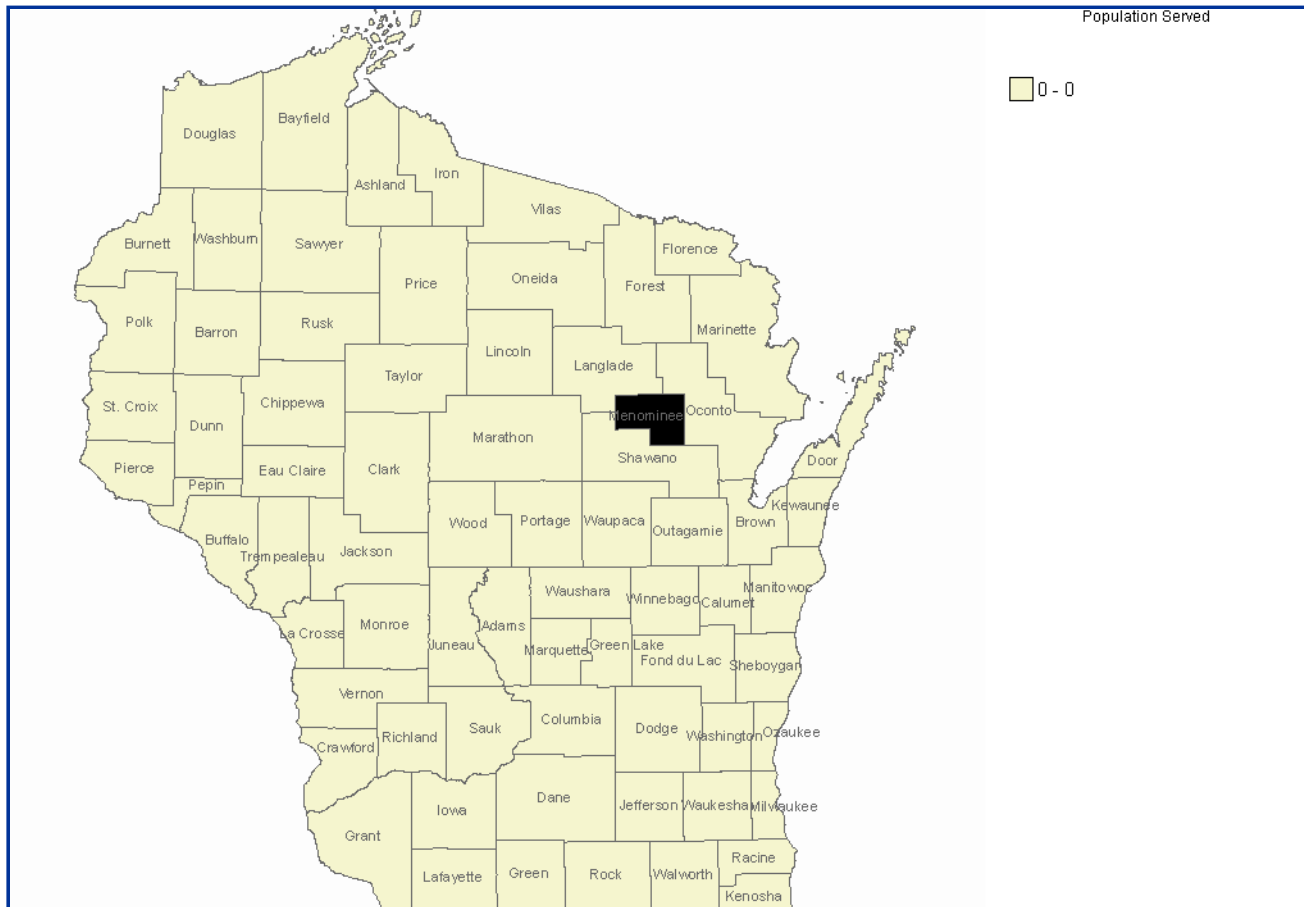
Maximum – The annual maximum level of the specific contaminant measured in the county's community water system(s).

"(Missing)" – No test results were available for the year indicated or prior years.

Specific regulatory and health information for each contaminant can be found in the tables at <http://water.epa.gov/drink/contaminants/index.cfm>.

Milwaukee County Environmental Health Profile, October 2010
Drinking Water - Haloacetic Acids (HAA5)

Population served where maximum HAA5 level is greater than or equal to 75 mcg/L, 2009



Note: Black shading indicates no data available.

County	Milwaukee					
	2007		2008		2009	
Year	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
HAA5 Mean (mcg/L)						
(Missing)	15	822,825	14	810,084	14	810,084
<15	9	160,489	10	173,230	10	173,230
15-<30	0	0	0	0	0	0
30-<45	0	0	0	0	0	0
45-<60	0	0	0	0	0	0
60-<75	0	0	0	0	0	0
75+	0	0	0	0	0	0

Milwaukee County Environmental Health Profile, October 2010

Drinking Water - Haloacetic Acids (HAA5)

County	Milwaukee					
Year	2007		2008		2009	
	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served	Number of Community Water Systems	Population Served
HAA5 Max (mcg/L)						
(Missing)	15	822,825	14	810,084	14	810,084
<15	9	160,489	10	173,230	10	173,230
15-<30	0	0	0	0	0	0
30-<45	0	0	0	0	0	0
45-<60	0	0	0	0	0	0
60-<75	0	0	0	0	0	0
75+	0	0	0	0	0	0

Notes:

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Population Served – A drinking water quality measure that estimates the total number of people that get water from a public water supply within a particular county. This number is a sum of all population served estimates from individual public water supplies that have their system locations identified within a particular county.

Mean – The annual average level of the specific contaminant measured in the county's community water system(s).

Maximum – The annual maximum level of the specific contaminant measured in the county's community water system(s).

"(Missing)" – No test results were available for the year indicated or prior years.

Specific regulatory and health information for each contaminant can be found in the tables at <http://water.epa.gov/drink/contaminants/index.cfm>.

Milwaukee County Environmental Health Profile, October 2010

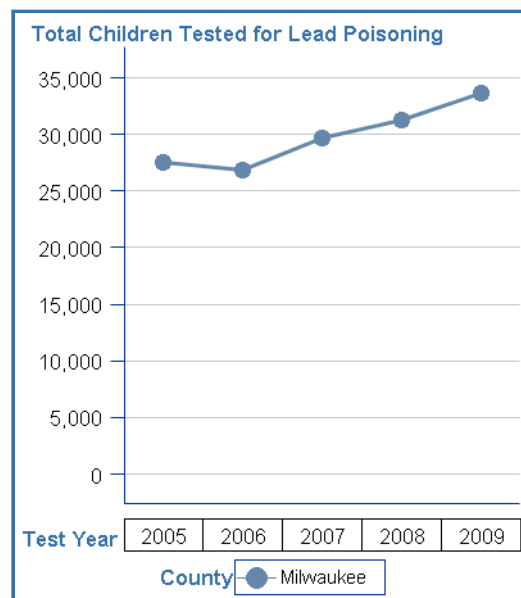
Childhood Lead Poisoning

Lead is a toxic metal that interferes with the normal development of a child's brain and can result in lower IQ and a greater likelihood of behavior problems, like aggression, hyperactivity, juvenile delinquency, and adult violent crime. Children under age six are the most vulnerable because of their rapid brain development and high absorption rate. Lead poisoning is more common in children two years of age, children in low income families, African American children, and children living in housing built before 1950. Children, at risk for lead poisoning, should be tested by a health care provider. Lead-based paint is the primary source of lead in a child's environment, and lead poisoning can be best prevented by removing this hazard. The data provided here are from the Wisconsin Childhood Lead Poisoning Prevention Program that works with other agencies throughout the state and out of state to collect and compile these data. For more information, please go to <http://dhs.wisconsin.gov/lead>.

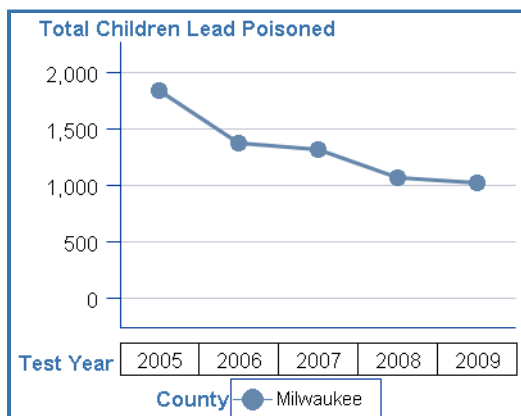
Number of children tested for lead poisoning, number poisoned and poisoning prevalence by age group, 2009

County	Milwaukee		
Test Year	2009		
	Total Children Tested for Lead Poisoning	Total Children Lead Poisoned	Lead Poisoning Prevalence
Age Group			
0-<1	3,572	26	0.73%
1-<2	11,076	364	3.29%
2-<3	6,478	265	4.09%
3-<6 NPT	2,206	69	3.13%
3-<6 PT	10,290	300	2.92%
Total	33,622	1,024	3.05%

Number of children tested for lead poisoning under age six, 2005-2009



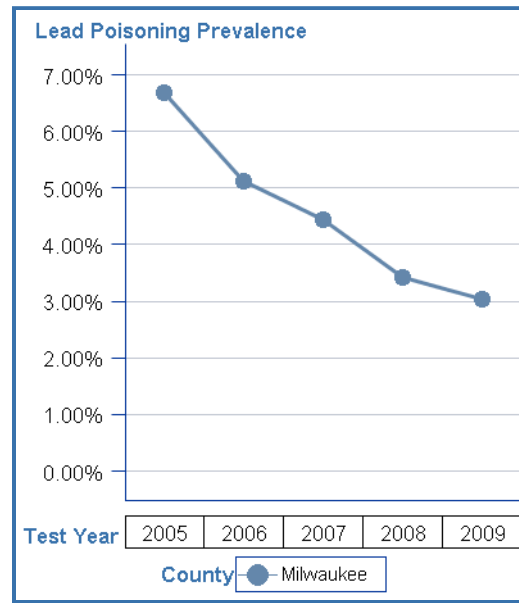
Number of children lead poisoned under age six, 2005-2009



Milwaukee County Environmental Health Profile, October 2010

Childhood Lead Poisoning

Percent of children found to be lead poisoned under age six, 2005-2009



Notes:

Total Children Tested for Lead Poisoning – Number of children who had a capillary or venous blood lead test. Only one test per child per year is used. The first test result ≥ 10 mcg/dL is used if there is at least one test ≥ 10 mcg/dL during the year. Otherwise the first test during the year is used. If a capillary test was followed by a venous test within 3 months, the result of the venous test is used.

Total Children Lead Poisoned – Number of children tested who are found to be lead poisoned (having a blood lead level of 10 mcg/dL or higher).

Lead Poisoning Prevalence – Percentage of children tested who are found to be lead poisoned. It is calculated as (Total Children Lead Poisoned / Total Children Tested for Lead Poisoning) (in percent).

Age Group - Children are grouped according to their age at time of testing.

PT - Previously tested for lead poisoning.

NPT - Not previously tested for lead poisoning.

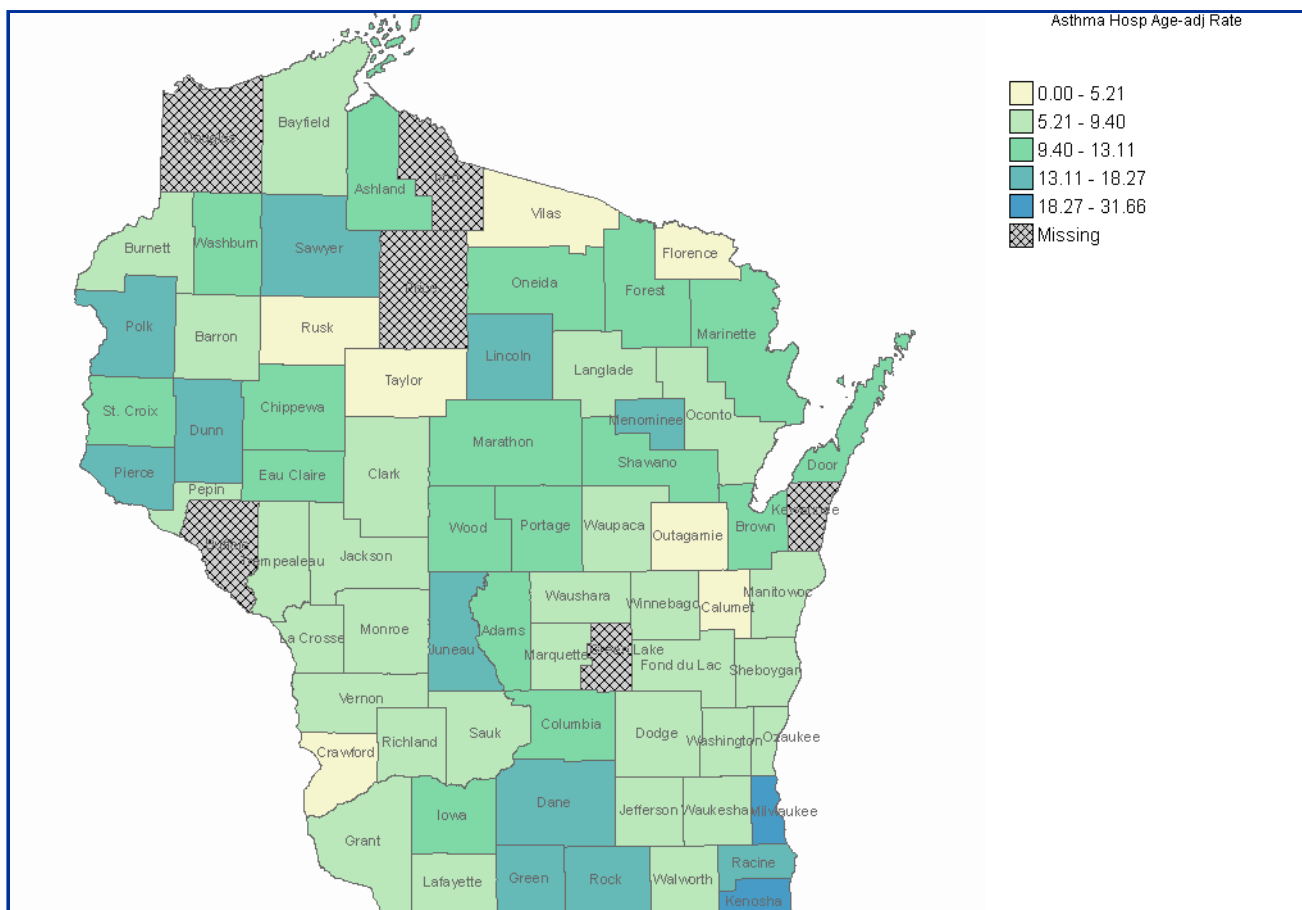
Test Year - Year in which the blood lead test was done. The data are for Jan 1, 2000 to Dec 31, 2009.

Milwaukee County Environmental Health Profile, October 2010

Asthma Hospitalizations

Asthma is a respiratory disease that causes the airways that carry oxygen to the lungs to become blocked and inflamed. People with asthma may be prone to attacks following exposure to asthma triggers such as particulate matter, ozone, seasonal allergens, tobacco smoke, and dander from pets, rodents, and cockroaches. Asthma is one of the most common chronic diseases in childhood, and is a leading cause of school absenteeism. While asthma does not have a cure, it can be controlled by the use of short- and long-acting medications and by reducing exposure to asthma triggers. Poorly controlled asthma can lead to frequent emergency department visits and inpatient hospitalizations. The data presented here are inpatient hospitalization data collected by the Wisconsin Hospital Association and distributed by the Wisconsin Division of Public Health's Office of Health Informatics (OHI). For more information, please go to <http://www.dhs.wisconsin.gov/eh/asthma/links.htm>.

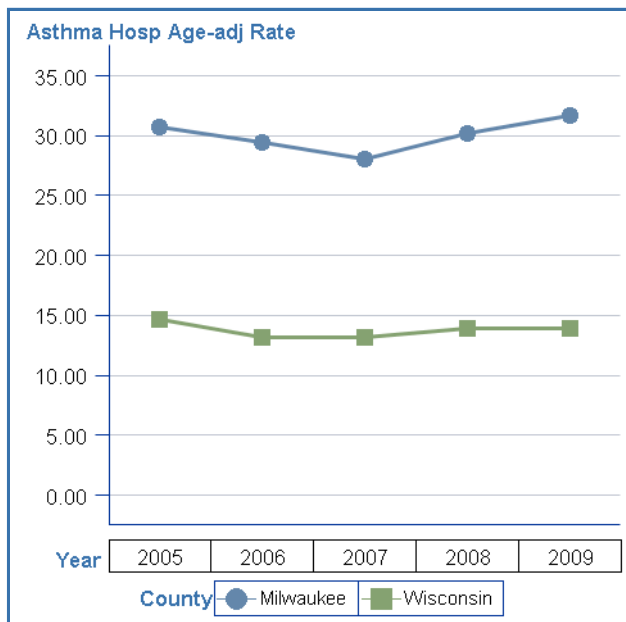
Age-adjusted asthma hospitalization rates per 10,000 population, 2009



Note: Gray crosshatch shading indicates the count is too small (between 1-4) and the rate is too unstable to publish.

Asthma Hospitalizations

County age-adjusted asthma hospitalization rate compared to the overall state rate, 2005-2009



Notes:

Rates are based on the number of hospitalizations per 10,000 county population and not the number of individuals admitted to the hospital. For example, if a person is hospitalized twice, this is counted as two hospitalizations.

All rates are age-adjusted based on age groups 0-4, 5-14, 15-34, 35-64, 65+.

Milwaukee County Environmental Health Profile, October 2010

Cancer

Cancer is a group of diseases in which abnormal cells in the body grow out of control. Cancer is not just one disease but many different diseases, with more than 100 different types. There are many risk factors that can affect cancer in ways that are not fully understood. Furthermore, each type of cancer is associated with its own specific set of risk factors. The data for the EPHT measures come from the Wisconsin Cancer Reporting System in the Wisconsin Division of Public Health, Bureau of Community Health Promotion. For more information, please go to <http://www.dhs.wisconsin.gov/wcrs/>.

All Ages. Rates are per 100,000.

5-Year Period	1998-2002				2003-2007			
	Count		Age-adj Rate		Count		Age-adj Rate	
	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Cancer Type								
Acute Lymphocytic Leukemia	65	381	1.3	1.5	72	417	1.5	1.6
Acute Myeloid Leukemia	204	1,165	4.4	4.2	227	1,214	4.8	4.2
Bladder	1,023	6,219	21.7	22.5	972	6,453	20.7	21.8
Brain and CNS	318	1,999	6.9	7.4	336	2,113	7.1	7.4
Chronic Lymphocytic Leukemia	200	1,361	4.3	4.9	255	1,418	5.4	4.8
Leukemia	635	4,035	13.5	14.6	765	4,207	16.2	14.4
Lung	3,526	18,155	77.0	66.2	3,417	18,533	74.2	63.4
Non-Hodgkin's Lymphoma	930	5,444	20.0	19.7	972	5,915	20.5	20.1
Thyroid	308	1,861	6.7	6.9	366	2,467	7.9	8.7

Pediatric. Rates are per 1,000,000 children ages 0-19.

5-Year Period	1998-2002				2003-2007			
	Count		Age-adj Rate		Count		Age-adj Rate	
	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Cancer Type								
Acute Lymphocytic Leukemia 0-19	37	227	26.6	30.7	39	250	27.9	34.1
Acute Myeloid Leukemia 0-19	5	45	3.6	5.9	14	66	10.0	8.8
Leukemia 0-19	49	297	35.2	40.0	62	351	44.2	47.6
Brain and CNS 0-19	35	202	25.3	26.8	26	215	18.4	29.0

Female Breast Cancer. Rates are per 100,000 females ages 0-49 and 50+.

5-Year Period	1998-2002				2003-2007			
	Count		Age-adj Rate		Count		Age-adj Rate	
	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Cancer Type								
Female Breast 0-49	693	4,083	41.3	41.8	638	3,996	37.1	40.0
Female Breast 50+	2,829	16,168	388.6	388.4	2,496	14,804	335.1	329.5

Notes:

All rates are annual averaged rates. Counts are full counts (not averaged).

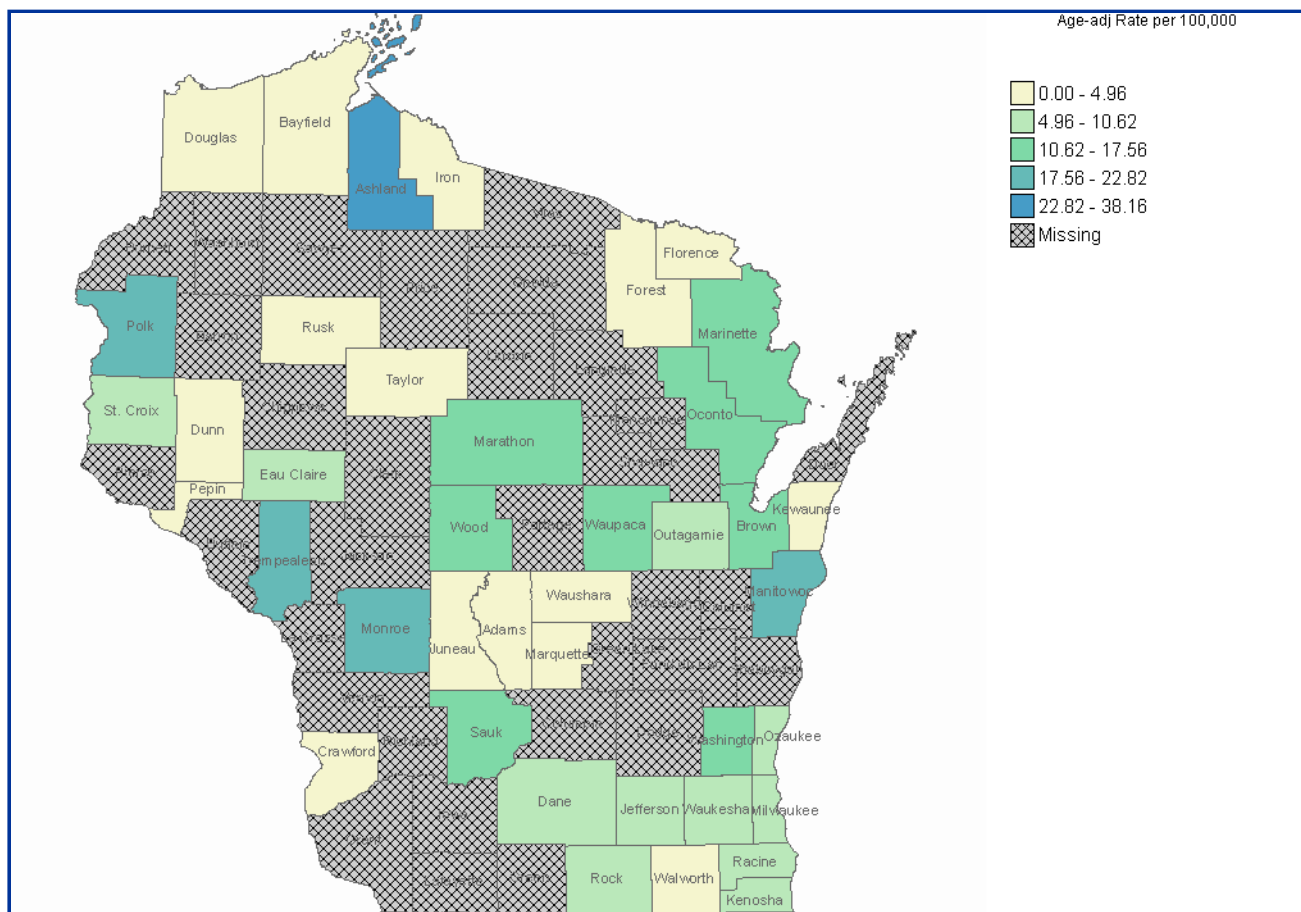
A missing count or rate, indicated by a period, means the count is too small (between 1-4) and the rate is too unstable to publish.

Milwaukee County Environmental Health Profile, October 2010

Carbon Monoxide Poisoning Emergency Department Visits

Carbon monoxide, or CO, is a toxic, colorless, odorless gas. CO is given off whenever fuel or other materials are burned. It is present in fumes such as those in vehicle exhaust, portable generators, gas stoves, ranges and other heating systems. CO fumes can build up in places that do not have good ventilation, such as a garage or house with closed windows and doors. Red blood cells pick up CO more easily than they pick up oxygen. If there is a lot of CO in the air, the body may replace oxygen in blood with CO. This blocks oxygen from getting into the body. Breathing high levels of CO can cause severe illness or death in a matter of minutes. The data provided here are collected by the Wisconsin Hospital Association and distributed by the Wisconsin Division of Public Health's Office of Health Informatics. For more information, please go to <http://www.dhs.wisconsin.gov/eh/air/fs/CO.htm>.

Age-adjusted carbon monoxide poisoning emergency department visit rates per 100,000 population, 2009



Note: Gray crosshatch shading indicates the count is too small (between 1-4) and the rate is too unstable to publish.

Milwaukee County Environmental Health Profile, October 2010
Carbon Monoxide Poisoning Emergency Department Visits

County	Milwaukee			Wisconsin		
	Count	Rate per 100,000	Age-adj Rate per 100,000	Count	Rate per 100,000	Age-adj Rate per 100,000
Year						
2002	74	7.80	7.75	392	7.20	7.29
2003	120	12.62	12.74	493	9.00	9.14
2004	96	10.08	9.89	535	9.71	9.87
2005	83	8.73	8.85	438	7.90	7.96
2006	101	10.61	10.65	461	8.27	8.52
2007	117	12.29	12.59	495	8.84	9.15
2008	87	9.12	8.94	465	8.26	8.52
2009	95	9.90	9.83	480	8.49	8.82

Notes:

Rates are based on the number of emergency department visits per 100,000 county population and not the number of individuals that visited the emergency department. For example, if a person is taken to the emergency department twice, this is counted as two visits.

A missing count or rate, indicated by a period, means the count is too small (between 1-4) and the rate is too unstable to publish.

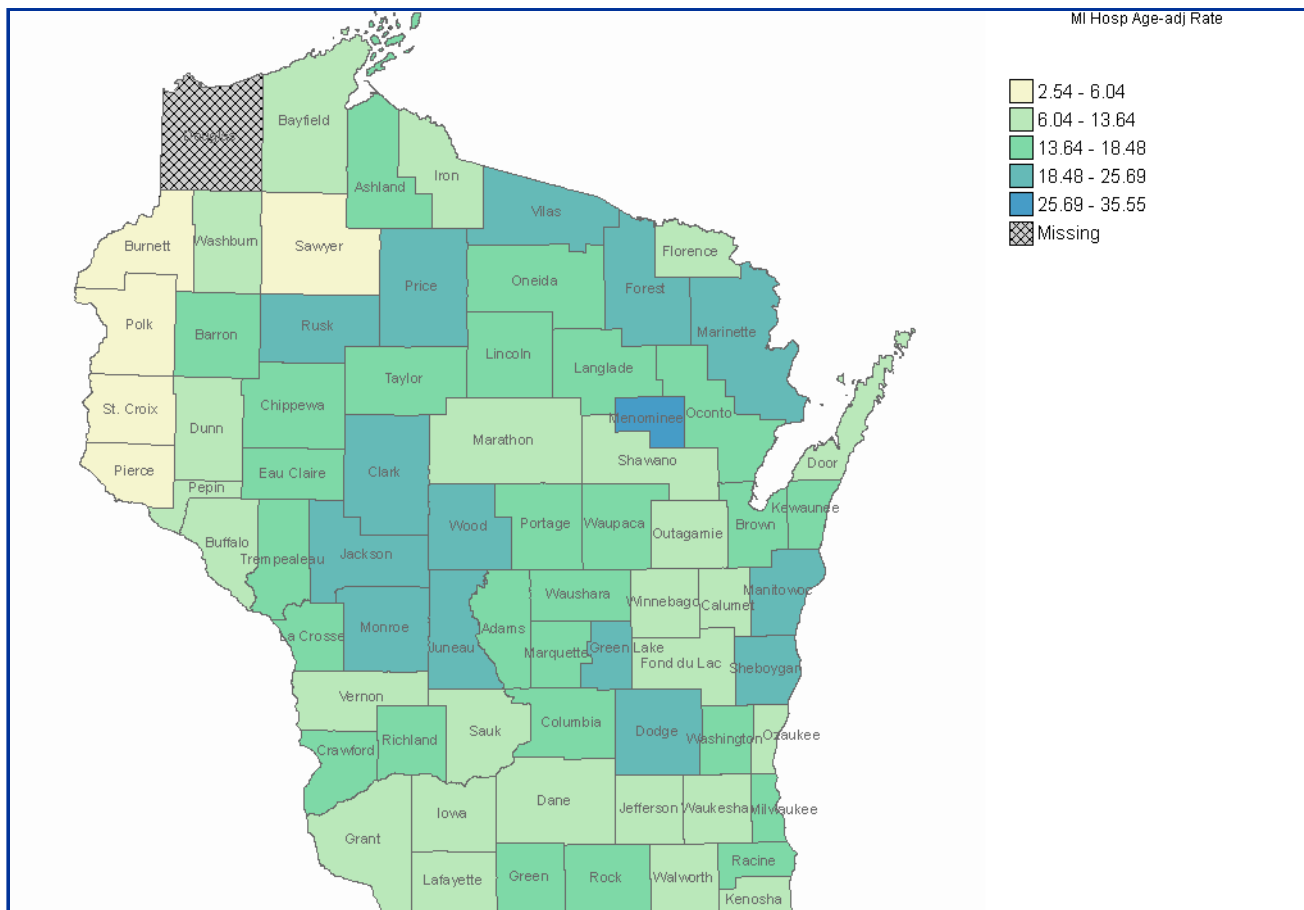
Age adjustment is based on 19 age groups: < 1, 1-4, 5-9, ..., 80-84, 85+.

Milwaukee County Environmental Health Profile, October 2010

Myocardial Infarction Hospitalizations

A heart attack (or myocardial infarction) is an acute health event in which one of more regions of the heart muscle experience a severe or prolonged decrease in oxygen supply caused by a blocked blood flow to the heart muscle. People with cardiovascular diseases such as hypertension are at particularly high risk for heart attacks. Cardiovascular disease is the most common cause of death in Wisconsin. Tobacco use, obesity, and poor diet are primary risk factors for cardiovascular disease. Exposure to particulate matter has also been shown to contribute to heart attack risk. Because heart attacks generally lead to hospitalization, the inpatient hospitalization data collected by the Wisconsin Hospital Association and distributed by the Wisconsin Division of Public Health's Office of Health Informatics (OHI) provide an important source of data on heart attacks in Wisconsin. For more information about heart attacks and cardiovascular disease go to: <http://dhs.wisconsin.gov/health/cardiovascular>.

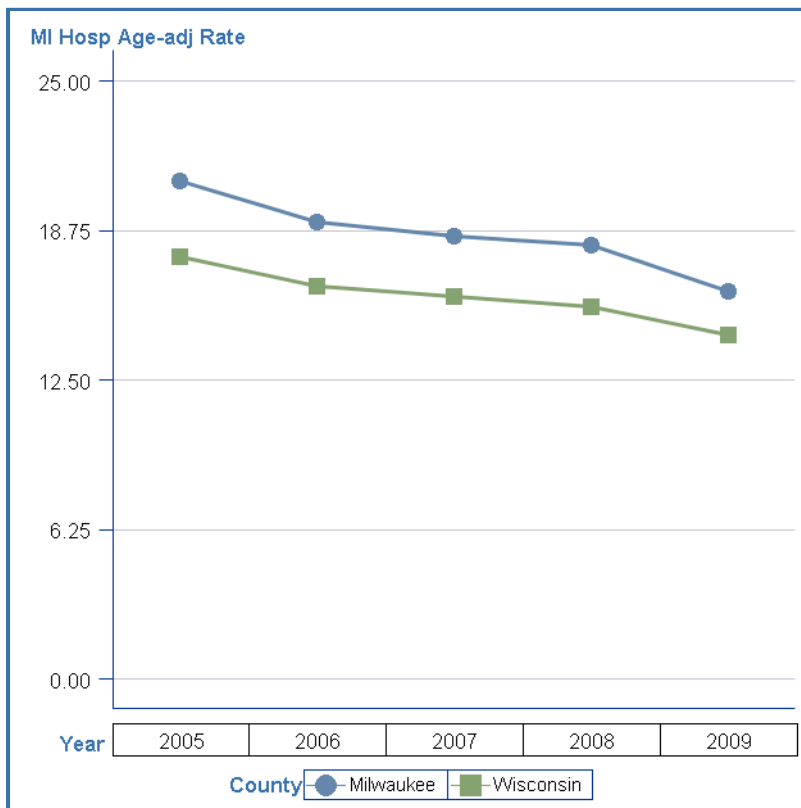
Age-adjusted myocardial infarction hospitalization rates per 10,000 population, 2009



Note: Gray crosshatch shading indicates the count is too small (between 1–4) and the rate is too unstable to publish.

Myocardial Infarction Hospitalizations

County age-adjusted myocardial infarction hospitalization rate compared to the overall state rate, 2005-2009



Notes:

Rates are based on the number of hospitalizations per 10,000 county population and not the number of individuals admitted to the hospital. For example, if a person is hospitalized twice, this is counted as two hospitalizations.

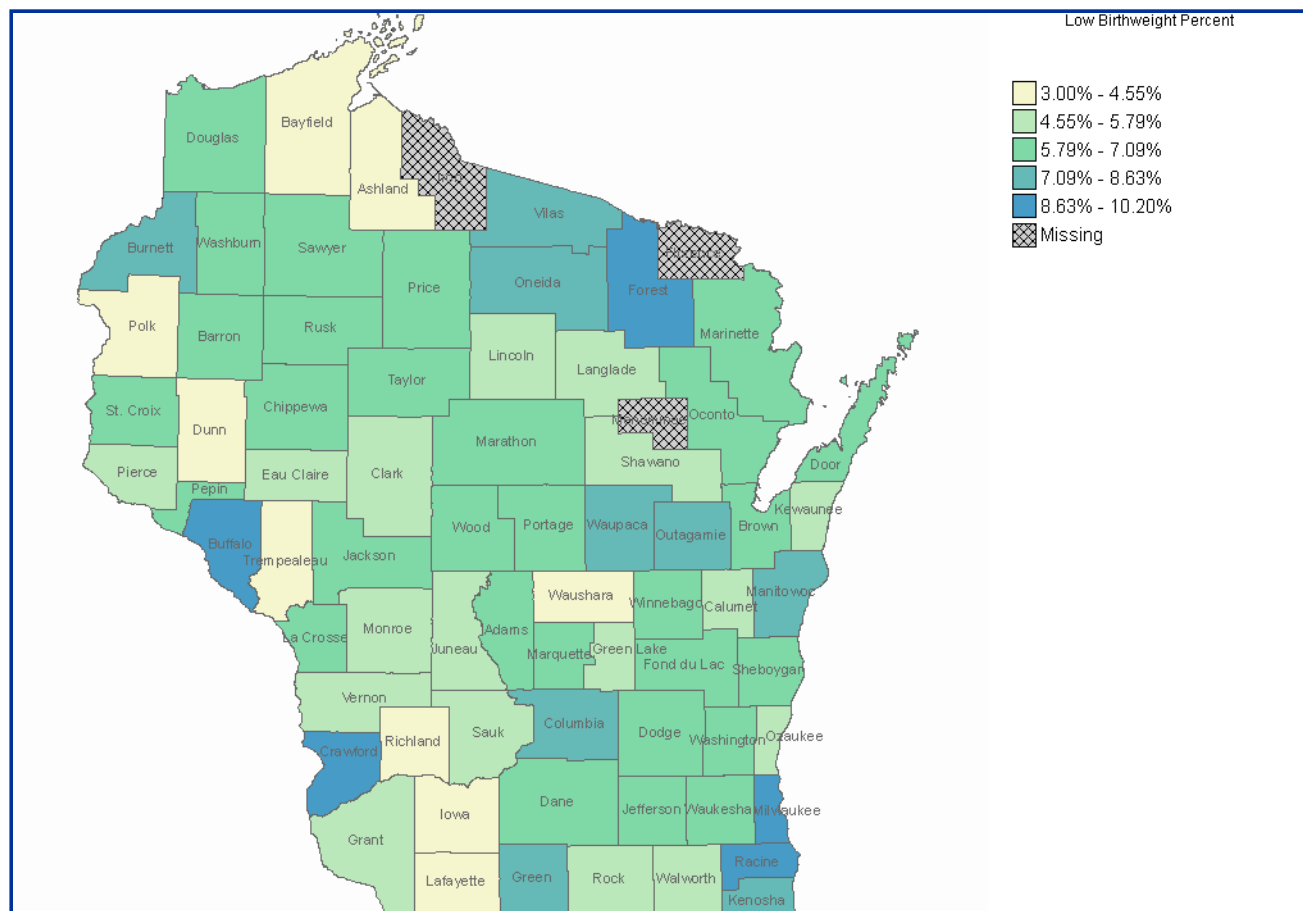
All rates are age-adjusted based on age groups 0-34, 35-44, 45-54, 55-64, 65-74, 74-84, 85+.

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Births

Reproduction is the result of a complex process. Reproductive outcomes include infant characteristics that may reflect the reproductive health of the parents, and thus might be affected by environmental exposures. Many factors can impact reproductive health, but many questions about direct associations with environmental exposures remain unanswered. The data are from Wisconsin resident birth and death certificates from the Wisconsin Division of Public Health's Office of Health Informatics (OHI). For more information, please go to <http://www.dhs.wisconsin.gov/stats/vitalstatistics.htm>.

Low birthweight percent, 2008

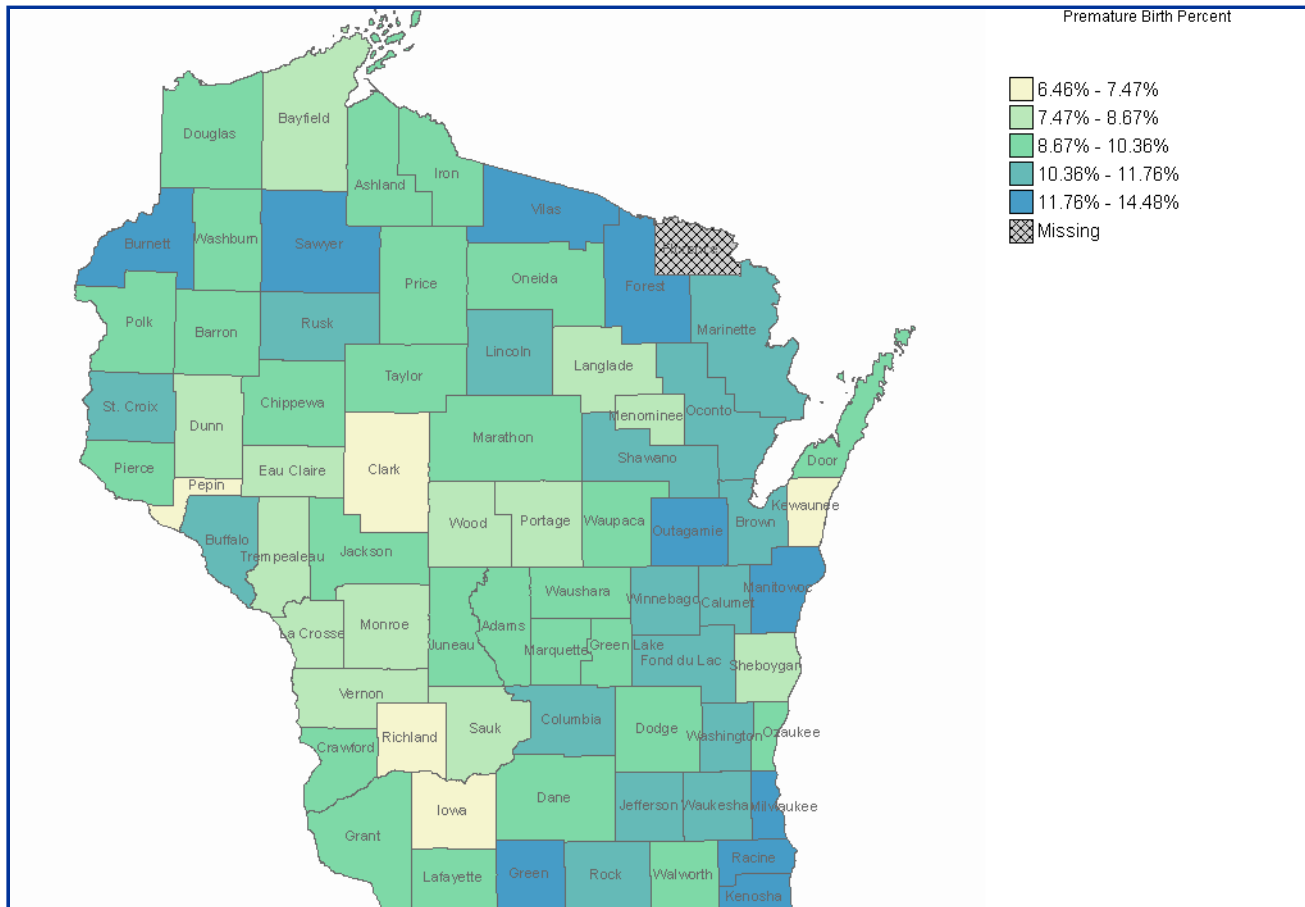


Note: Gray crosshatch shading indicates the count is too small (between 1-4) and the rate is too unstable to publish.

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Births

Premature birth percent, 2008



Note: Gray crosshatch shading indicates the count is too small (between 1-4) and the rate is too unstable to publish.

Reproductive outcome measures by county compared to the state of Wisconsin, 2005-2008

Year	2005		2006		2007		2008	
County	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Birth Count	14,906	70,934	15,195	72,302	15,318	72,757	15,368	72,002
Low Birthweight Count	1,424	4,992	1,366	4,994	1,407	5,089	1,375	5,051
Low Birthweight Percent	9.55%	7.04%	8.99%	6.91%	9.19%	6.99%	8.95%	7.02%
Percent of Low Birthweight among Term Singleton Births	3.31%	2.15%	2.95%	2.09%	3.08%	2.21%	3.40%	2.27%
Percent of Very Low Birthweight among Singleton Births	1.77%	0.96%	1.56%	0.98%	1.59%	0.93%	1.39%	0.93%
Premature Birth Count	2,027	8,033	2,095	8,104	2,051	8,072	2,017	7,970
Premature Birth Percent	13.60%	11.32%	13.79%	11.21%	13.39%	11.09%	13.12%	11.07%
Percent of Premature among Singleton Births	11.96%	9.66%	12.27%	9.74%	12.01%	9.62%	11.71%	9.58%

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Births

Reproductive outcome measures by county compared to the state of Wisconsin, 2005-2008

Year	2005		2006		2007		2008	
County	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Percent of Very Premature among Singleton Births	2.36%	1.55%	2.29%	1.64%	2.38%	1.57%	2.22%	1.54%
Birth Rate	15.97	12.71	16.36	12.89	16.26	12.90	16.41	12.69
General Fertility Rate	71.95	61.15	75.09	63.41	75.55	64.47	76.81	64.18
Total Fertility Rate	2,126.83	1,926.75	2,220.37	1,985.30	2,233.55	1,999.12	2,261.74	1,971.29
Sex Ratio	1,052.32	1,052.07	1,032.50	1,051.35	1,055.83	1,048.45	1,050.71	1,046.47

Notes:

Data are for all infants born to mothers who are Wisconsin residents at the time of birth. Some of the births occurred outside of Wisconsin.

Gestational age is based on the computed difference between the date of onset of last menstrual period (LMP) and the date of infant's birth. If the date of LMP is missing or the computed difference is less than 16 weeks or more than 45 weeks, then the clinical estimate of gestational age reported by the attending physician is substituted.

A missing count or rate, indicated by a period, means the count is too small (between 1-4) and the rate is too unstable to publish.

Birth Count - Count of all live births.

Low Birthweight Count - Infant weighs less than 2,500 grams.

Low Birthweight Percent = Low Birthweight Count / Birth Count × 100.

Percent of Low Birthweight Term Singleton Births - Number of live born singleton infants born at term with a birthweight of less than 2,500 grams per 100 live term singleton births.

Percent of Very Low Birthweight Singleton Births - Number of live born infants with a birthweight of less than 1,500 grams per 100 live singleton births.

Premature Birth Count - Gestational age is less than 37 weeks.

Premature Birth Percent = Premature Count / Count × 100.

Percent of Premature Singleton Births - Number of live singleton infants born before 37 weeks of gestation divided by the total number of live singleton infant births.

Percent of Very Premature Singleton Births - Number of live singleton infants born before 32 weeks of gestation divided by the total number of live singleton infant births.

Birth Rate - Number of live births per 1,000 population.

General Fertility Rate - Number of live births per 1,000 females ages 15-44.

Total Fertility Rate - Calculated by multiplying the age-specific birth rate for each five-year age group from ages 10 through 49 by five (the number of years in the age group), and adding the results for each of the groups.

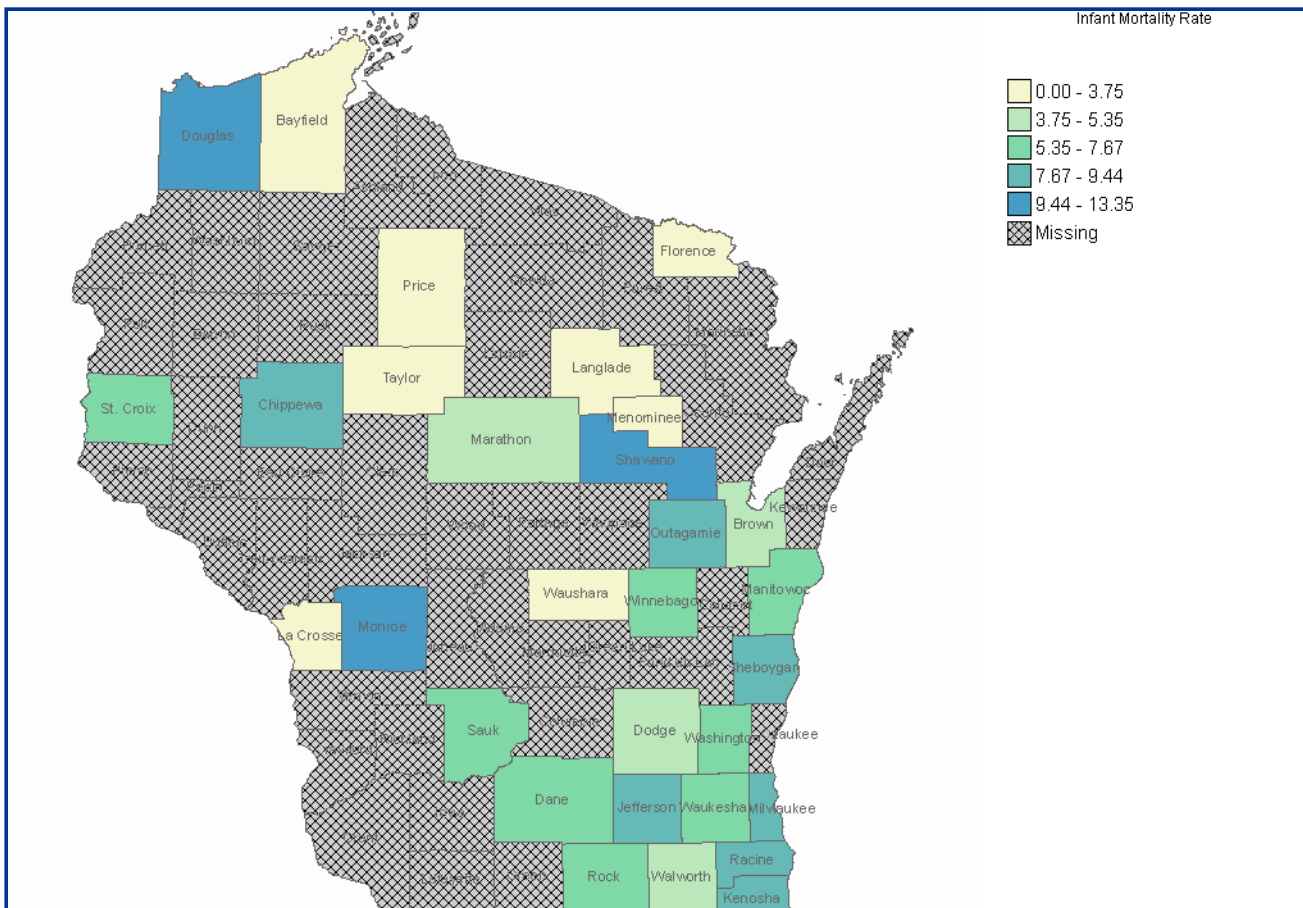
Sex Ratio - Male live births per 1,000 female live births.

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Infant Mortality

Reproduction is the result of a complex process. Reproductive outcomes include infant characteristics that may reflect the reproductive health of the parents, and thus might be affected by environmental exposures. Many factors can impact reproductive health, but many questions about direct associations with environmental exposures remain unanswered. The data are from Wisconsin resident birth and death certificates from the Wisconsin Division of Public Health's Office of Health Informatics (OHI). For more information, please go to <http://www.dhs.wisconsin.gov/stats/vitalstatistics.htm>.

Infant mortality rates per 1,000 live births, 2008



Note: Gray crosshatch shading indicates the count is too small (between 1-4) and the rate is too unstable to publish.

Year	2005		2006		2007		2008	
County	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin	Milwaukee	Wisconsin
Infant Mortality Rate	9.66	6.61	10.20	6.39	9.01	6.45	9.44	6.96
Neonatal Mortality Rate	6.17	4.50	7.04	4.30	5.42	4.01	6.18	4.57
Postneonatal Mortality Rate	3.49	2.11	3.16	2.09	3.59	2.43	3.25	2.39

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Infant Mortality

Notes:

A missing count or rate, indicated by a period, means the count is too small (between 1-4) and the rate is too unstable to publish.

Infant Mortality Rate – Number of infant deaths that occur before 365 days of age per 1,000 live births during the year.

Neonatal Mortality Rate – Number of infant deaths that occur before 28 days of age per 1,000 live births during the year.

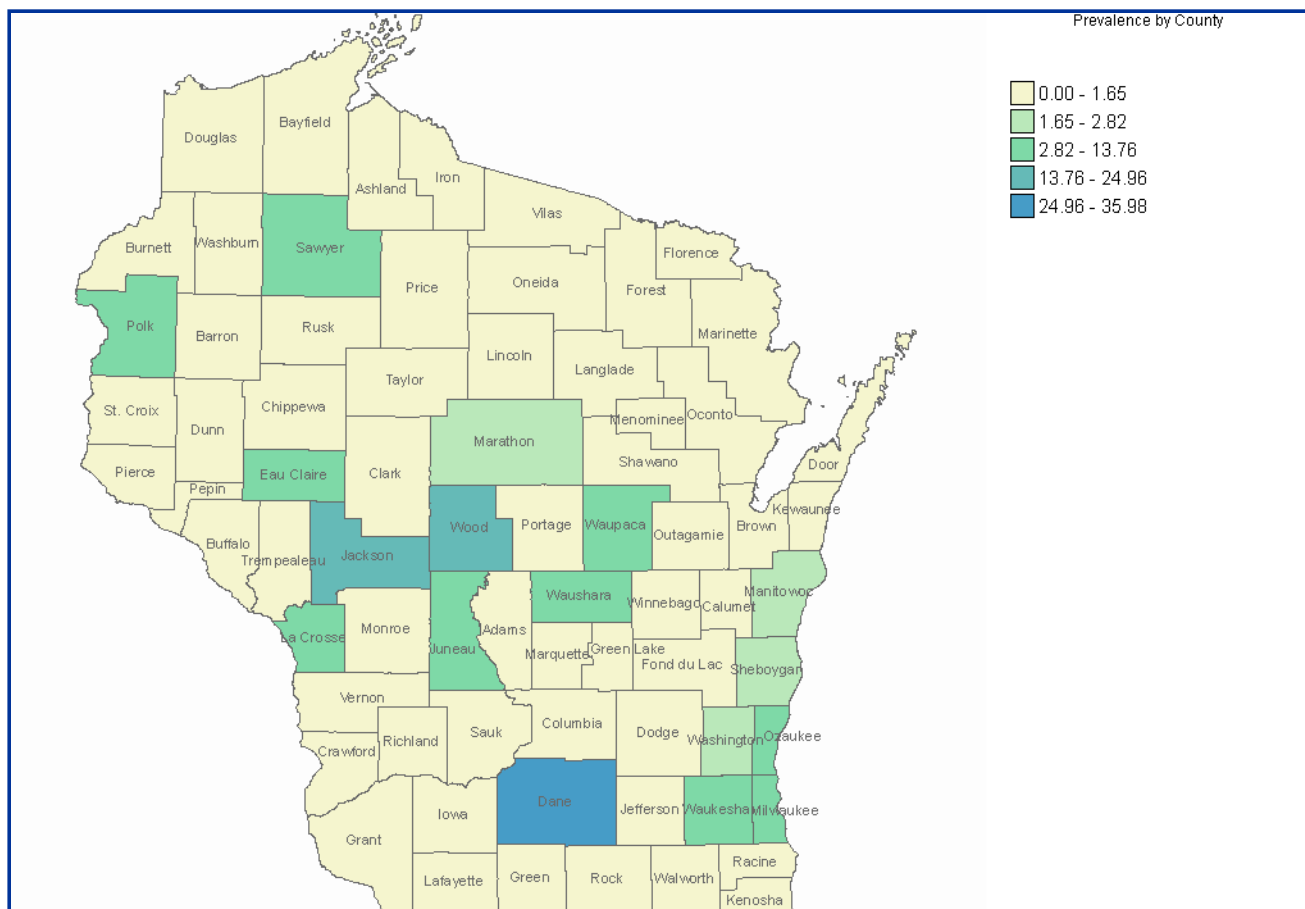
Postneonatal Mortality Rate – Number of infant that deaths occur from 28-364 days of age per 1,000 live births during the year.

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Birth Defects

A birth defect is a problem that happens while the baby is developing in the mother's body. Most birth defects happen during the first 3 months of pregnancy. A birth defect may affect how the baby's body looks, works or both. It may be found before birth, at birth or anytime after birth. Most defects are found within the first year of life. Some birth defects (such as cleft lip or clubfoot) are easy to see, but others, such as heart defects or hearing loss, are found using special tests (such as x-rays, CAT scans or hearing tests). Birth defects can vary from mild to severe. The data presented here are from the Wisconsin Birth Defects Registry. For more information, please go to <http://www.dhs.wisconsin.gov/health/children/birthdefects/index.htm>.

Prevalence of Trisomy 21 (number of cases per 10,000 live births), 2004-2008



Milwaukee County, 2004-2008

	Count	Prevalence by County
Birth Defect		
Anencephaly	0	0.00
Spina Bifida (without Anencephaly)	16	2.12
Hypoplastic Left Heart Syndrome	17	2.25
Tetralogy of Fallot	21	2.78
Transposition of the Great Arteries	9	1.19
Cleft Lip with or without Cleft Palate	54	7.16
Cleft Palate without Cleft Lip	41	5.44

Wisconsin, 2004-2008

	Count	Prevalence by State
Birth Defect		
Anencephaly	3	0.08
Spina Bifida (without Anencephaly)	38	1.06
Hypoplastic Left Heart Syndrome	31	0.87
Tetralogy of Fallot	46	1.28
Transposition of the Great Arteries	19	0.53
Cleft Lip with or without Cleft Palate	160	4.47
Cleft Palate without Cleft Lip	156	4.36

Milwaukee County Environmental Health Profile, October 2010

Reproductive Outcomes - Birth Defects

Milwaukee County, 2004-2008

	Count	Prevalence by County
Birth Defect		
Hypospadias	72	9.55
Gastroschisis	13	1.72
Upper Limb Deficiencies	6	0.80
Lower Limb Deficiencies	1	0.13
Trisomy 21	62	8.22

Wisconsin, 2004-2008

	Count	Prevalence by State
Birth Defect		
Hypospadias	255	7.12
Gastroschisis	21	0.59
Upper Limb Deficiencies	34	0.95
Lower Limb Deficiencies	17	0.47
Trisomy 21	233	6.51

Notes:

Prevalence is the number of cases per 10,000 live births.